

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	Daniel L. Dunn	Docket: 186714/US
Application No.:	10/688,858	Confirmation No. 9455 Linh Giang
Filing Date:	October 17, 2003	Examiner: Le
Title:	SYSTEM AND METHOD FOR ASSESSING HEALTHCARE RISKS	Group Art Unit: 3626

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPELLANTS' REPLY BRIEF

Dear Sir:

This Reply Brief is filed in response to the Examiner's Answer mailed on July 22, 2009. A Claim Appendix has also been included herewith that provides a listing of the correct, currently pending claims.

The following comments are made in response to the arguments raised in the Examiner's Answer. Applicants also maintain the arguments presented in their Appeal Brief submitted on June 26, 2007.

I. The Focus of this Appeal Is the Patentability of the Claimed Invention, Not the Patentability of the Examiner's Generalized Version of the Invention

The claimed invention is a method and system and method for assessing risk of insuring a healthcare patient in which the following functions are performed:

receiving demographic data on a patient and prescription data for each
prescription filled by the patient;

assigning the **prescription data for each prescription** to at least one risk group **based upon at least one medical condition typically treated by the prescription;**

storing risk data for the patient, **wherein the risk data includes the risk groups for all prescription data of the patient;** and

calculating a risk score for the patient based upon the risk data and the demographic data of the patient. (Emphasis added)

The claim language indicated in bold is not included in the Examiner's version of the rejected claims. Examiner's Answer at 4. However, it is the claimed invention, including all of the recited features and function, and not the Examiner's truncated, generalized version of the invention, that is at issue here.

For example, the Examiner argues that "Robertson teaches the storing of risk data for the patient . . . and teaches calculating a risk score for the patient based upon the risk data and the demographic data of the patient." Examiner's Answer at 11. To the contrary, Robertson does not mention anything about patients, healthcare or risk data that "includes the risk groups for all prescription data of the patient" as defined in claims 1 and 10. The Examiner's analysis improperly ignores the express features and limitation of the claims.

The Examiner's improper generalization of the claimed invention is necessary to support the alleged motivation to combine the references, which is that all forms of risk assessment, regardless of subject matter, are applicable to one another. See, e.g., Examiner's Answer at 9 ("Robertson's teachings of specific risk classification techniques are reasonably pertinent for assessing risk in any field including health care.") However, looking at the actual claim language, there is no evidence to support the premise that the use of behavioral and personality trait data to assess whether automobile drivers are going to have accidents and file auto insurance claims addressed in Robertson would logically be combined with the use of prescription data collected in Bienvenu to determine health insurance risks using the *specific methodology* embodied in the claimed invention.

Additionally, it is the Examiner's burden to establish that each of the claimed features is actually known, such that the asserted combination of references would achieve the claimed combination of features if put together. *KSR* presupposes that all of the claimed features are

actually known. *See KSR Int'l. Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 1741 (2007). As stated in *KSR*, the determination is whether “there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* Where there is no evidence to suggest that claimed features were known at the time the application was filed, it is improper to reject the claim under §103.

As discussed in the Appellant’s Appeal brief, neither Robertson nor Bienvenu teaches several key features of the claimed invention. In particular, neither reference teaches the claimed functions of “assigning the prescription data for each prescription to at least one risk group based upon at least one medical condition typically treated by the prescription” or “calculating a risk score for the patient based upon the risk data and the demographic data of the patient.” The paragraphs in the references that are cited by the Examiner simply do not teach or suggest these functions.

Also, in responding to the Appellants’ assertion that Robertson does not teach or suggest the use of demographic data in calculating risk, the Examiner points to ¶¶ 32 and 51 of Robertson as teaching the collection of demographic data in addition to survey answers. Examiner’s Answer at 7-8. ¶32 only states that the behavioral risk classification system taught in Robertson “need not be a replacement for conventional risk classification technique but can be used in combination therewith.” Robertson, however, does not advocate this approach nor does it describe any use of demographic data to classify risk except in ¶¶27 and 53, in which it describes risk classification based upon “secondary characteristics such as age and gender” as “a fairly crude and inefficient predictor of claim reporting.” Such statements unequivocally criticize the utility of risk assessments based upon demographic data, and do not “merely” teach that both “are known in the art and can be used together and neither as a replacement for the other” as asserted by the Examiner. *See* Examiner’s Answer at 7.

Concerning Robertson ¶51, what the Examiner fails to appreciate is that this portion of the Robertson disclosure relates to the “methodology for devising the questionnaire,” which is illustrated in FIG. 1 and described in ¶¶35-58 of Robertson. The demographic data collected is evaluated using a regression analysis to assess whether the survey questions are predictive of automobile risk. Robertson at ¶¶52-54. Once the predictive questions are determined, they are used to assess whether a prospective insured should be categorized as a high risk for auto insurance purposes. Robertson ¶¶62-64.

Thus, Robertson does not teach or suggest the claimed functionality of “calculating a risk score for a patient based upon risk data and demographic data of the patient” recited in claims 1 and 10.

II. Robertson’s “Risk Classification Techniques” Cannot Plausibly Incorporate Prescription Data

The Examiner repeatedly refers to the Robertson “risk classification techniques,” asserting that the additional of the prescription data collected by the Bienvenu system would have been obvious for furthering the analysis of the healthcare insurance risk. E.g., Examiner’s Answer at 3, 5, 7-11. Evaluation of this assertion necessitates an understanding of the “techniques” actually taught by Robertson.

Specifically, Robertson teaches (1) a method of devising a survey for use in assessing automobile insurance risks (Figs. 1-2, 5) and (2) a method of classifying a prospective insured into a risk group based upon answers to the survey (Fig. 3). To develop the survey, test survey questions are provided (see ¶¶38-48), and the answers to the questions along with conventional variables of age, marital status, years of driving experience, and number of miles driven per year are collected. ¶ 51. “[T]he survey data is analyzed to determine a set of individual items whose answers significantly predict the number of claims made.” ¶52. Notably the conventional variables collected in the survey “were subjected to a regression analysis” and “found to be a fairly crude and inefficient predictor of claim reporting.” ¶53. Instead, four survey questions were found to be useful in predicting claim reporting. ¶¶ 54-58. Once the survey has been developed, Robertson teaches a method of classifying prospective insureds into “risk group[s] based on the answers to the survey statements.” ¶64.

Given the teachings of Robertson, it is difficult to imagine how or why a “person of ordinary skill in the art would be motivated to combine the Robertson risk classification techniques with the Bienvenu prescription history system in order to assess a healthcare patient’s risk effectively and accurately” as asserted by the Examiner. Would the prescription data take the place of the personality trait survey data used to develop a questionnaire? Would the prescription data be used to somehow classify potential insureds into risk groups? If so, would it replace the survey data or be used in conjunction with it, and if so, how? The alleged

combination may seem plausible at an abstract level, but it is not when the Robertson technique is examined in detail.

Moreover, Robertson teaches away from such a combination by advocating a simpler, cost-effective solution to auto risk assessment that does not rely on the collection of past data about the insured. For example, in addressing the trend of gathering credit information to assess auto insurance risk, Robertson states that the

use of credit information, however, threatens to create regulatory and legal issues for several reasons, including concerns . . . about increasing intrusions into privacy. Other information may be so costly to collect that it forecloses a proposed classification scheme as unprofitable.

¶ 9. If collection of credit information is seen as unworkable due to cost and legal issues, a risk assessment method requiring collection of prescription data for each potential insured would certainly suffer from similar drawbacks.

Accordingly, it would not have been obvious to one of ordinary skill to combine the asserted references to achieve the present invention as claimed in claims 1-10.

CONCLUSION

For the reasons set forth above as well as those set forth in the Appellant's Appeal Brief, Appellants respectfully request reversal of the Examiner's rejection of claims 1-10 under 35 U.S.C. § 103(a).

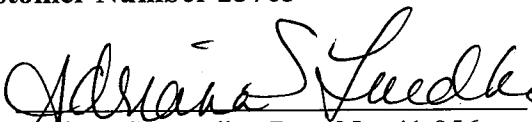
Should any additional fees be necessary, the Commissioner is hereby authorized to charge any fee deficiency associated with this paper or request to Deposit Account No. 04-1420.

Respectfully submitted,

DORSEY & WHITNEY LLP
Customer Number 25763

Date: August 19, 2009

By:


Adriana S. Luedke, Reg. No. 41,956
(612) 492-6858

CLAIM APPENDIX

Listing of Claims:

1. A computer-implemented method for assessing risk of insuring a healthcare patient, the method comprising one or more computers performing the following:
 - receiving demographic data on a patient and prescription data for each prescription filled by the patient;
 - assigning the prescription data for each prescription to at least one risk group based upon at least one medical condition typically treated by the prescription;
 - storing risk data for the patient, wherein the risk data includes the risk groups for all prescription data of the patient; and
 - calculating a risk score for the patient based upon the risk data and the demographic data of the patient.
2. The method of claim 1, wherein the step of assigning the prescription data to at least one risk group comprises using national drug codes to classify each prescription.
3. The method of claim 2, wherein the step of assigning the prescription data to at least one risk group further comprises categorizing each national drug code classification into one of a number of pharmacy risk groups.
4. The method of claim 1, further comprising defining additional member risk markers based on patient age and other characteristics known to indicate that the patient belongs to a high risk category and using the additional member risk markers to calculate the patient's risk score.
5. The method of claim 1, further comprising providing a clinical and demographic risk profile for the patient based on the patient's age, gender and a mix of clinical and demographic risk profiles and using the patient's clinical and demographic risk profile to calculate the patient's risk score.
6. The method of claim 5, further comprising providing multiple patient risk markers for

patients with pharmacy services that indicate multiple medical conditions.

7. The method of claim 1, wherein each risk group is assigned a numerical risk value based upon the patient's demographic data, and the patient's risk score is the sum of the numerical risk values of the risk groups in the patient's risk data.

8. The method of claim 7, wherein the risk score is computed using pre-determined weights and a patient's patient risk marker profile.

9. The method of claim 3, wherein the pharmacy risk groups comprise patient risk markers.

10. An information processing system comprising:

a computer processor for:

receiving demographic data on a patient and prescription data for each prescription prescribed for the patient;

assigning the prescription data for each prescription to at least one risk group based upon at least one medical condition typically treated by the prescription;

storing risk data for the patient in an associated database, wherein the risk data includes the risk groups for all prescription data of the patient; and

calculating a risk score for the patient based upon the risk data and the demographic data of the patient.